

What is claimed is:

1. A method of transferring via a network boot files from a server to a client having a pre-OS environment, comprising:  
installing a client certificate of authenticity in the  
5 client;  
requesting by the client via the network that the server transfer the boot files to the client;  
sending by the client via the network the installed client certificate of authenticity;  
10 authenticating by the server of the client by the received client certificate of authenticity;  
sending by the server via the network a server certificate of authenticity to the client in response to authenticating by the server of the client;  
15 authenticating by the client of the server by the received server certificate of authenticity;  
requesting by the authenticated client via the network that the authenticated server transfer the boot files to the authenticated client;  
20 transferring the boot files from the authenticated server to the authenticated client in response to the requesting by the authenticated client;  
authenticating by the authenticated client of the transferred boot files; and  
25 executing by the authenticated client of the authenticated boot files.
2. The method of claim 1 wherein clients that have an invalid or revoked certificate are not authenticated or answered by the server.

3. The method of claim 1 wherein servers that have an invalid or revoked certificate are not acknowledged by the client.
4. The method of claim 1 wherein boot files received by the client that are incorrectly signed are not executed by the client.
5. The method of claim 1 wherein the transferred boot files include a signature and wherein the client verifies the signature.
6. A method of transferring boot files from a server to a client, comprising:
  - authenticating by the server of the client;
  - authenticating by the client of the server; and
- 5 transferring the boot files from the authenticated server to the authenticated client.
7. The method of claim 6 further comprising authenticating by the authenticated client of the transferred boot files.
8. The method of claim 7 further comprising executing by the authenticated client of the authenticated boot files.
9. The method of claim 6 wherein clients that have an invalid or revoked certificate are not authenticated or answered by the server.
10. The method of claim 6 wherein servers that have an invalid or revoked certificate are not acknowledged by the client.

11. The method of claim 6 wherein boot files received by the client that are incorrectly signed are not executed by the client.

12. The method of claim 6 wherein the transferred boot files include a signature and wherein the client verifies the signature.

13. A method of transferring via a network boot files from a server to a client having a pre-OS environment, comprising:

installing a client certificate of authenticity in the  
5 client;

requesting by the client via the network that the server transfer the boot files to the client;

sending by the client via the network the installed client certificate of authenticity;

10 authenticating by the server of the client by the received client certificate of authenticity; and

transferring the boot files from the server to the authenticated client.

14. The method of claim 13 further comprising:

authenticating by the authenticated client of the transferred boot files;

executing by the authenticated client of the authenticated

5 boot files.

15. The method of claim 14 wherein boot files received by the client that are incorrectly signed are not executed by the client.

16. The method of claim 13 wherein the transferred boot

files include a signature and wherein the client verifies the signature.

17. The method of claim 13 wherein clients that have an invalid or revoked certificate are not authenticated or answered by the server.

18. A method of transferring via a network boot files from a server to a client having a pre-OS environment, comprising:

installing a client certificate of authenticity in the  
5 client;

requesting by the client via the network that the server transfer the boot files to the client;

sending by the client via the network the installed client certificate of authenticity; and

10 receiving by the client of the boot files from the server.

19. The method of claim 18 further comprising:

authenticating by the authenticated client of the transferred boot files;

executing by the authenticated client of the authenticated  
5 boot files.

20. The method of claim 19 wherein boot files received by the client that are incorrectly signed are not executed by the client.

21. The method of claim 18 wherein the transferred boot files include a signature and wherein the client verifies the signature.

22. The method of claim 18 wherein clients that have an

invalid or revoked certificate are not authenticated or answered by the server.

23. A method of transferring via a network boot files from a server to a client having a pre-OS environment, comprising:

- receiving by the server a request from the client via the
- 5 network that the server transfer the boot files to the client;
- receiving by the server via the network a previously installed client certificate of authenticity from the client;
- 10 authenticating by the server of the client by the received client certificate of authenticity; and
- transferring the boot files from the server to the authenticated client.

24. The method of claim 23 wherein clients that have an invalid or revoked certificate are not authenticated or answered by the server.

25. The method of claim 23 wherein the transferred boot files include a signature and wherein the client verifies the signature.

26. A method of transferring via a network boot files from a server to a client having a pre-OS environment, comprising:
- requesting by the client via the network that the server
  - 5 transfer the boot files to the client;
  - sending by the server via the network a server certificate of authenticity to the client;
  - authenticating by the client of the server by the received

server certificate of authenticity;  
10 requesting by the client via the network that the  
authenticated server transfer the boot files to the client;  
and  
transferring the boot files from the authenticated server  
to the client in response to the requesting by the client.

27. The method of claim 26 wherein servers that have an  
invalid or revoked certificate are not acknowledged by the  
client.

28. The method of claim 26 wherein the transferred boot  
files include a signature and wherein the client verifies  
the signature.

29. The method of claim 28 wherein boot files received by  
the client that are incorrectly signed are not executed by  
the client.

30. A method of transferring via a network boot files from  
a server to a client having a pre-OS environment,  
comprising:

5 receiving by the server a request from the client via the  
network that the server transfer the boot files to the  
client;  
receiving by the server via the network a previously  
installed client certificate of authenticity from the  
10 client;  
authenticating by the server of the client by the received  
client certificate of authenticity; and  
sending the boot files to the authenticated client by the  
server via the network.

31. The method of claim 30 wherein servers that have an invalid or revoked certificate are not acknowledged by the client.

32. The method of claim 30 wherein the transferred boot files include a signature and wherein the client verifies the signature.

33. The method of claim 32 wherein boot files received by the client that are incorrectly signed are not executed by the client.

34. A method of transferring via a network boot files from a server to a client having a pre-OS environment, comprising:

5 requesting by the client via the network that the server transfer the boot files to the client;  
receiving by the client via the network a server certificate of authenticity from the server;  
authenticating by the client of the server by the received  
10 server certificate of authenticity;  
requesting by the client via the network that the authenticated server transfer the boot files to the client;  
and  
receiving the boot files from the authenticated server to  
15 the client in response to the requesting by the client.

35. The method of claim 34 wherein servers that have an invalid or revoked certificate are not acknowledged by the client.

36. The method of claim 34 wherein the transferred boot files include a signature and wherein the client verifies

the signature.

37. The method of claim 34 wherein boot files received by the client that are incorrectly signed are not executed by the client.

38. A method of transferring via a network boot files from a server to a client having a pre-OS environment, comprising:

- 5 requesting by the client via the network that the server transfer the boot files to the client;
- transferring the boot files from the server to the client in response to the requesting by the client;
- authenticating by the client of the transferred boot files;
- 10 and
- executing by the authenticated client of the authenticated boot files.

39. The method of claim 38 wherein the transferred boot files include a signature and wherein the client verifies the signature.

40. The method of claim 39 wherein boot files received by the client that are incorrectly signed are not executed by the client.

41. A system for transferring boot files, comprising:  
a client;

- a server having boot files;
- 5 software authenticating the client to the server;
- software authenticating the server to the client; and
- software transferring the boot files from the authenticated server to the authenticated client.



42. The system of claim 41 further comprising software authenticating the transferred boot files to the authenticated client.

43. The method of claim 42 wherein the authenticated client includes an operating system generated from the executed authenticated boot files.

44. The system of claim 41 wherein the transferred boot files include a signature and wherein the client verifies the signature.

45. A computer readable medium for transferring via a network boot files from a server to a client having a pre-OS environment, comprising instructions for:

5 requesting by the client via the network that the server transfer the boot files to the client;  
sending by the client via the network a previously installed client certificate of authenticity; and  
receiving by the client of the boot files from the server.

46. A computer readable medium for transferring via a network boot files from a server to a client having a pre-OS environment, comprising instructions for:

5 receiving by the server a request from the client via the network that the server transfer the boot files to the client;  
receiving by the server via the network a previously installed client certificate of authenticity from the  
10 client;  
authenticating by the server of the client by the received client certificate of authenticity; and

transferring the boot files from the server to the authenticated client.

47. A computer readable medium for transferring via a network boot files from a server to a client having a pre-OS environment, comprising instructions for:

- 5 receiving by the server a request from the client via the network that the server transfer the boot files to the client;
- receiving by the server via the network a previously installed client certificate of authenticity from the
- 10 client;
- authenticating by the server of the client by the received client certificate of authenticity; and
- sending the boot files to the authenticated client by the server via the network.

48. A computer readable medium for transferring via a network boot files from a server to a client having a pre-OS environment, comprising instructions for:

- requesting by the client via the network that the server
- 5 transfer the boot files to the client;
- receiving by the client via the network a server certificate of authenticity from the server;
- authenticating by the client of the server by the received server certificate of authenticity;
- 10 requesting by the client via the network that the authenticated server transfer the boot files to the client;
- and
- receiving the boot files from the authenticated server to the client in response to the requesting by the client.